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I want to be creative, but...Preference for creativity, perceived clear
outcome goals, work enjoyment, and creative performance

Darija Aleksić, Matej Černe
University of Ljubljana

Anders Dysvik, Miha Škerlavaj
BI Norwegian Business School

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I WANT TO BE CREATIVE, BUT...

PREFERENCE FOR CREATIVITY, PERCEIVED CLEAR OUTCOME

GOALS, WORK ENJOYMENT, AND CREATIVE PERFORMANCE

Abstract: In today's quickly changing work environment, many individuals want to be creative at their workplace, but only some of them succeed at manifesting these tendencies. In three studies, using both field and experimental data, we focused on transforming individuals' preference for creativity, defined as an inclination for liking and wanting to be creative, into actual creativity. We first conducted a pilot Study 1 to establish discriminant validity to related constructs and provided initial evidence on its predictive and incremental validity. Next, we performed a field Study 2, where we found that transforming preferences for creativity into supervisor-rated creativity is contingent upon employees' perceptions of clear outcome goals. Clear outcome goals fostered individuals' preference for creativity to result in higher levels of supervisor-rated creative behavior—a finding that was replicated in an experimental Study 3. Furthermore, we explored whether work enjoyment mediated the moderated relationship between preference for creativity and creative outcomes. The results supported our mediated moderation model, whereby the manipulation of clear goals led to higher work enjoyment, influencing individuals' preference for creativity to result in higher ratings of their creative outcomes.

Keywords: preference for creativity, creativity, perceived clear outcome goals, work enjoyment

In today's quickly changing work environment, organizations depend on employees to come up with solutions to complex and nonroutine challenges (Cascio, 1998). Innovation, or capitalization on creative output in the form of implemented solutions (Amabile, 1996; 2012, p. 4), therefore represents a micro-level basis for innovation at the organizational level and, in turn, to firm performance. Nowadays employees are expected to be more creative, as professional, managerial, and administrative work is becoming more complex and knowledge intensive (Berg, in press). Nevertheless, while some individuals at work want to choose to come up with something new and simple, why do some of them succeed at manifesting these tendencies at work while others do not?

The majority of the existing organizational creativity research has highlighted the important interplay between personal and contextual factors at work that are beneficial for fostering creativity (Amabile, Conti, Coon, Lazenby, & Herron, 1996; Shalley, Zhou, & Oldham, 2004; Woodman, Sawyer, & Griffin, 1993). While these studies have increased our knowledge of the work setting best suited for creativity, transforming individuals' inclination for creativity into actual creativity or output appears to remain a predominantly under-researched process at the individual level of analysis. Among the available findings, personality theories of creativity pin traits that are beneficial for creative endeavor (e.g., Barron & Harrington, 1981). Individual-level research on creativity also includes an investigation of the cognitive process associated with creativity (Reiter-Palmon, Mumford, O'Connor Boes, & Runco, 1997; Simonton, 2000), intelligence (Guilford, 1967; Sternberg, 1985), and expertise (Reilly, 2008), as well as motivational factors (Amabile, 1985). Nevertheless, this string of research would benefit from extending to account for the tangible outcomes of preference for creativity at work.

To the best of our knowledge, there is a paucity of studies at the intersection of personality and cognition theories of creativity and organizational creativity research. This is unfortunate because individuals' inclination to want to be creative at work, stemming from the individual preference development process, may be an important individual characteristic in describing the extent to which employees actually want to be creative when working on complex tasks.

In this paper, we offer a new theoretical perspective on creativity by formally defining preference for creativity as individuals' inclination of liking and wanting to be creative in performing a complex task. In defining preference for creativity, we relate to economics-based preference development literature (Slovic, 1995; Tversky & Thaler, 1990) and argue that it is an intention to choose based on cognition and reasoning, not just affect. Preference development is a constructive, context-dependent but relatively stable process (Druckman & Lupia, 2000; Tversky & Thaler, 1990). The likelihood and frequency of preferring to be creative is based upon consistent patterns of an individual's cognitive processes (Brandts & Charness, 2000) through which they evaluate fit in terms of knowledge, skills, information from the context, and affect related to creativity. In turn, this represents a stepping stone for one to be creative at work. Our first intended theoretical contribution is to introduce the concept of preference for creativity and investigate whether preference for creativity relates to actual creativity.

Second, we rely on goal-setting theory (Locke, 1968) and aim to provide increased insight into the first phases of creative idea generation, i.e., transforming wanting to be creative (preference for creativity) to actual creativity. We base our theorizing on goal setting theory (Locke, 1968) to examine moderating the role of the degree to which individuals perceive their goals to be clear. The basic assumption of a goal setting model of behavior is

that outcome goals, i.e., what an individual is trying to accomplish, are immediate regulators of human behavior (Erez, Earley, & Hulin, 1985). We propose that the more individuals perceive their outcome goals to be clear, the more likely that individuals' preference for creativity should result in creative performance. This is so because when goals are perceived to be clear they succeed in helping focus employees' attention toward goal-relevant activities.

Our third and final intended contribution is to explore whether individual work enjoyment—a facet of flow (Bakker, 2008; Csikszentmihalyi, 1975)—mediates the combined roles of preference for creativity and perceived goal clarity as predictors for creativity. Flow is defined as an extremely intrinsically enjoyable experience when an individual engages in an activity with total involvement (Csikszentmihalyi, 1975; 1991). There is limited research available on how work enjoyment facilitates the creative process in the work domain. This is important because it enables an in-depth understanding of the work environment suitable for individuals to express their creative preference, as the work enjoyment dimension of flow could act as a crucial but under-studied explanatory mechanism stemming from goal clarity and transforming preference for creativity into actual creativity. If individuals want and intend to be creative, chances are that they should subjectively perceive the experience as pleasurable (Csikszentmihalyi, 1997a). Individuals who experience flow at work are more likely to be completely absorbed in their work and forget everything that is happening around them because they enjoy the activity so much (Bakker, 2005; Csikszentmihalyi & LeFevre, 1989). Work enjoyment as the core dimension of flow promotes individuals' focus on and self-motivation for a task, making individuals more likely to seek novelty and opportunities for action (Ceja & Navarro, 2011), which should thus encourage creativity (Sosik, Kahai, & Avolio, 1999).

We tested our hypotheses using a three-study multi-method approach (in two field and one experimental study settings). In what follows, we first explain how preference for

creativity differs from related constructs, then how it predicts actual creativity. Next, we develop a basic moderating hypothesis of clear outcome goals on the relationship between preference for creativity and actual creativity, followed by a complex mediating moderation hypothesis of work enjoyment as a mediator in the moderating role of clear outcome goals. The empirical part mirrors this conceptual design. We establish discriminant (from creative personality, openness, need for cognition, ideational behavior, adaptation-innovation, creative process engagement, creative role identity, and creative self-efficacy) and predictive validity of preference for creativity in Study 1, examine the moderating role of clear outcome goals in field Study 2 (Hypothesis 1), and finally test the mediated moderation in experimental Study 3 (Hypotheses 2a–2c).

Theory and Hypothesis

Preference for creativity

In general, choices reflect individual preferences (Drolet, Luce, & Simonson, 2009). As creativity is often a choice (Ford, 1996), whether or not individuals opt for wanting or liking to be creative may therefore in part depend on their preference development. This is a constructive, context-dependent process (Tversky & Thaler, 1990), built up in the process of elicitation over a longer period of time. People discover and are able to describe their preferences by evaluating how their past choices have strengthened or weakened their way of life (Wildavsky, 1987). Thus, based on experience, an individual will develop similar preferences and likely make similar choices in similar situations in the future.

As we define *preference for creativity* as individuals' inclination for liking and wanting to be creative when given the opportunity, it has to be emphasized that to express this preference by means of choice is purposeful behavior (Slovic, 1995). Therefore, cognition and also therefore reasoning may form an important basis for the preference for creativity. Before

individuals can like or want to be creative, they must have adequate knowledge, information, and experience, built up in the preference development process. In addition to this, high preference for creativity requires good information processing, problem solving, and other cognitive skills related to creativity.

Furthermore, preferences are also formed from individuals' interactions with their broad social context—from living with other people and using these relations as a social filter to develop preferences throughout the course of life within specific cultural and institutional arrangements (Wildavsky, 1987). They generally come from proximity to others with similar preferences (Sherkat & Wilson, 1995) and emerge from interactions between individuals and their narrow and broad environments (Druckman & Lupia, 2000). Social context (at work and beyond) throughout the lifetime plays an important role in the development of preference for creativity because it provides information about likely consequences of the choice. Individuals will more likely want to be creative (have a high preference for creativity) if they obtain information from the context about the consequences of being creative and cognitively process it, i.e., evaluate the positive and negative aspects of it.

Based on the above, the preferences for creativity are relatively stable, stored in memory and drawn on when making decisions (Druckman & Lupia, 2000). This is so because individuals' preferences are developed based on a consistent pattern (Brandts & Charness, 2000) of their dominant way of thinking, responding to particular stimuli with similar feelings repeatedly, and constantly responding to situations in a similar manner. Accordingly, preferences serve as a cognitive marker that reminds individuals how to interact with various aspects of their environment (Druckman & Lupia, 2000). Actually choosing to be creative, as the outcome of preference for creativity, is therefore the result of evaluated judgment through which individuals have cognitively assessed whether they liked or disliked something, past

experiences, and (the fit with) the environment (Druckman & Lupia, 2000). Such individuals at work frequently want to conduct the task creatively. Thus, employees with high preference for creativity are also likely to opt for creative behavior, similar to the case for individuals with highly creative personality (Barron & Harrington, 1981). Through the preference development process, employees acquire adequate knowledge and information needed to conduct creative tasks, including the information on the value of creative behavior in their environment. Only when employees have the necessary knowledge and know that creative behavior is desired, they develop higher levels of preference for creativity, likely cognitively deciding to devote time and effort to conduct the task creatively. Based on their positive experience, employees perceive creative behavior as useful and valuable, and therefore continue to devote their time and effort to conduct tasks creatively, and may eventually even start enjoying it for its own sake. In turn, their creative behavior should be recognized by their colleagues and supervisors at work. Therefore, an inclination to be creative should lead to higher levels of actual supervisor-reported creativity.

Perceived clear outcome goals as a moderating construct in the relationship between preference for creativity and actual creativity

Because individuals who have developed their preference for creativity should also frequently opt for creative behavior, it is interesting to examine what influences this relationship. Creativity, as any behavior, will ultimately be constrained by the setting (Wildavsky, 1994), and this paper focuses on such boundary conditions. Creativity forms from individual inclinations that are established toward the very beginning of the creative process, in the construction of their creative preference. Individual creative behavior is about developing solutions to job-related problems (Shalley, 1991). Therefore, if individuals are provided with a context that is supportive of such endeavors (see, e.g., Amabile, 1996;

Oldham & Cummings, 1996), they should transform their preference for creativity to exhibit higher levels of actual creativity.

Yet whether individuals who want to be creative exhibit higher levels of creativity can depend on the appropriate goals set. Namely, goal-setting theory suggests a positive relationship between goals and performance (Locke, 1968), as goals present an end state toward which an individual strives as well as serve as immediate regulators of action and human behavior (Erez & Kanfer, 1983). However, goals are often perceived by individuals as vague and unclear (Ellström, 2001), and as such they may inhibit individuals' preference for creativity resulting in actual creativity. This is because perceived unclear goals prevent individuals from knowing exactly what they are striving to achieve. For example, individuals can like and want to choose to be creative in achieving given goals; however, if they perceive a given goal as unclear, they do not know exactly what is needed for the goal accomplishment and what is valued by the organization (Vancouver & Schmitt, 1991). Individuals who don't know what is expected of them on a task cannot direct all their attention and effort toward the generation of creative and appropriate responses (Shalley, 1995). According to Csikszentmihalyi (1990, p. 4) "for the activities that are creative or open-ended in nature, a person must develop a strong sense of what he/she intends to do or negotiate goals and rules during the activity." Thus, we expect that perceived clear goals would increase the level of creative behavior that should result from individuals' preference for creativity.

Although perceived unclear goals may direct individuals' attention to some degree (Litchfield, 2008), research has shown that when goals are perceived as clear and easy to understand and directed toward creative behavior, there is a correlation with higher levels of creativity (Shalley, 1995). Perceived clear goals are measurable, unambiguous, and helpful in absorbing uncertainty and creating focus (Doran, 1981; Yemm, 2013; McGrath, 2001).

Perception of clear goals increases arousal, focuses attention on the given goals, and provides information about desirable behavior (Heath, Larrick, & Wu, 1999). Therefore, individuals who want to be creative and know what is expected of them (i.e., have perceived clear goals) focus their attention on finding creative solutions to reach the given goals. Linking out two overarching theories (goal-setting and flow theory), flow-at-work research has also shown that perceived clear goals promote flow experience (Csikszentmihalyi, 1991, 1997b; Fullagar & Mills, 2008) and thereby creativity (Eisenberger, Jones, Stinglhamber, Shanock, & Randall, 2005; Sosik, Kahai, & Avolio, 1999; Wu, Lin, & Lin, 2011). Therefore, by providing clear goals toward which the individuals are helped to direct their energy and focus (Shalley & Gilson, 2004), supervisors meet a critical condition for fostering higher levels of employee creativity (Amabile & Gryskiewicz, 1987). We propose that perceived clear goals positively moderate the relationship between preference for creativity and actual creativity.

Hypothesis 1. Perceived clear outcome goals moderate the relationship between preference for creativity and actual creativity. The higher the perceived outcome goal clarity, the more positive the relationship. The lower the perceived outcome goal clarity, the more negative the relationship.

The explanatory mechanism of work enjoyment

We propose that flow in the form of work enjoyment mediates the moderating effect of perceived clear goals on the relationship between preference for creativity and actual creativity. We first explain why perceived clear goals encourage flow in terms of work enjoyment and then examine why work enjoyment experience strengthens the relationship between preference for creativity and actual creativity.

According to Csikszentmihalyi (1991, p. 4), flow is “a state in which people are so involved in an activity that nothing else seems to matter; the experience itself is so enjoyable that people will do it even at a great cost, for the sheer sake of doing it.” It is a state of complete absorption in activity, characterized by the total concentration on an activity and an extremely intrinsically enjoyable experience of total engagement and involvement (Csikszentmihalyi, 1975; Ghani & Deshpande, 1994; Pearce, Ainley, & Howard, 2005). As such, it is closely related to intrinsic motivation; however, intrinsic motivation represents a motivation to engage in an activity purely for the sake of the activity itself (Lepper, Greene, & Nisbett, 1973), whereas flow describes the quality of subjective experiences (how people sense intrinsic motivation) (Csikszentmihalyi, 1992).

According to Bakker (2005), flow is characterized by absorption, work enjoyment, and intrinsic work motivation. Absorption refers to a state of total concentration, where awareness is narrowed down to the activity itself, where everything else is forgotten and all distractions are excluded from consciousness (Csikszentmihalyi, 1991; Chu & Lan, 2010); thereby, individuals are totally immersed in their work (Bakker, 2008). Individuals who experience flow at work usually enjoy their work and feel happy; therefore, they “make positive judgments about the quality of their working life” (Bakker, 2008, p. 401). Furthermore, intrinsic motivation refers to “performing a certain work-related activity with the aim of experiencing the inherent pleasure and satisfaction in the activity” (Bakker, 2008, p. 401).

Csikszentmihalyi (1975) used the term enjoyment to describe flow experience. In the lives of average adults the great majority of flow experiences, and thereby enjoyment, come from work (Csikszentmihalyi & LeFevre, 1989). Individuals who often experience flow become highly motivated to work (Csikszentmihalyi & LeFevre, 1989; Sosik et al., 1999) and find enjoyment in their work; they feel happier and are able to work actively for a longer period of time (Csikszentmihalyi, Kolo, & Baur, 2004). Because flow is perceived as a

positive phenomenon, many scholars and practitioners share a strong interest in finding factors that promote flow (Csikszentmihalyi & Nakamura, 1989; Kowal & Fortier, 1999; Jackson, Thomas, Marsh, & Smethurst, 2001; Novak, Hoffman, & Duhachek, 2003; Salanova, Bakker, & Llorens, 2006; Demerouti, 2006).

Several studies have demonstrated that perceived clear goals are positively associated with experiencing flow and thereby with work enjoyment (Salanova et al., 2006; Fullagar & Kelloway, 2009; Csikszentmihalyi et al., 2004) because flow is likely to occur when an individual is faced with a task that he/she perceives has clear goals that require specific responses (Csikszentmihalyi, 1997b). Individuals who perceive goals to be clear and who know exactly what they need to do will be fully concentrated on the implementation of a pursued goal (Csikszentmihalyi et al., 2004; Fullagar & Mills, 2008). Furthermore, when individuals know exactly what they need to achieve they will be able to make positive judgments about the quality of their working life. Thereby, they should experience higher levels of work enjoyment.

Thus, perceived clear goals encourage individuals to experience work enjoyment because they highlight aspects of individuals' work roles to which they should attend (Locke & Latham, 1990) and provide clear information about what individuals should do. Therefore, individuals can develop a proper skill set to address the given goals, which enhances the quality of their work experience. Shortly after experiencing work enjoyment, an individual feels the positive effects of the performed activities (Csikszentmihalyi, 1997b; Mathwick & Rigdon, 2004), such as higher self-esteem, productivity (Wells, 1988), positive mood, higher levels of satisfaction, constant search for challenges (Ceja & Navarro, 2011), positive emotions (Eisenberger et al., 2005), exploratory behavior (Ghani & Deshpande, 1994), creativity (Larson, 1988), feelings of wellbeing, and many others. Perceived clear goals

promote work enjoyment, as one of the core dimensions of flow, and thereby promote the positive consequences of flow. Individuals who often experience work enjoyment will connect their work with all these positive consequences of flow and should be happier at work and enjoy their work more. Thus, we predict that individuals who have clear outcome goals will be more likely to experience work enjoyment.

Hypothesis 2a. Perceived clear outcome goals are positively associated with work enjoyment.

We further propose that work enjoyment, in turn, will strengthen the association between preference for creativity and actual creativity. We base this hypothesis on flow theory (Csikszentmihalyi, 1975). Flow was found to be a central component that affects work and other domains of highly creative individuals (Csikszentmihalyi, 1997a). “Individuals who develop their talent and creativity are those who continue to follow their sense of enjoyment in chosen activities” (Shernoff, Csikszentmihalyi, Shneider, & Shernoff, 2003). Enjoyment, an important component of flow (Bakker, 2008), is thus in itself a predictor of creative behavior.

Flow promotes a sense of enjoyment at work, focus on a given task, and intrinsic motivation, thereby stimulating individual creativity (Sosik et al., 1999). It is also connected with exploratory behavior (Ghani & Deshpande, 1994) (defined as curiosity), increased interest in learning, and exploratory thinking (Hoffman & Novak, 1996). Curiosity is the key characteristic of creative individuals because it steers them toward novelty and challenges that trigger exploratory behavior (Wu et al., 2011). For creativity to be facilitated to a higher extent, individuals should benefit from enjoying being curious (Csikszentmihalyi, 1997a), as is the case with artists, musicians, and dancers, which are frequently deemed to be among the

most creative professions. We predict that work enjoyment, stemming from clear outcome goals, will in turn encourage individuals to engage in creative behavior.

Flow in terms of work enjoyment results in positive effects (Chen, 2006; Eisenberger et al., 2005; Ghani & Deshpande, 1994), which are important conditions for higher levels of creativity (Amabile, Barsade, Mueller, & Staw, 2005). Thus, we assume that work enjoyment influences creativity. Positive affect and exploratory behavior (which are also consequences of the experience of work enjoyment) enable individuals to identify creative solutions, thus leading to creativity (Amabile et al., 2005). Therefore, experiencing work enjoyment will promote individuals who want to be creative (i.e., those who have a higher preference for creativity) to actually perform their work task in a creative manner, as work enjoyment leads to greater effort and persistence. Individuals who often experience enjoyment at work have a need to constantly seek challenges and are flexible, curious, and open to new possibilities, as well as enjoy experimenting with new ideas (Ceja & Navarro, 2011; Csikszentmihalyi, 1991). Therefore, flow experience in terms of enjoyment—in this respect similar to intrinsic motivation (Dysvik & Kuvaas, 2011)—prompts a faster transition from the intention to carry out an activity to its actual implementation (Baumann & Scheffer, 2010). Fullagar and Kelloway (2009) found that students who experienced flow were happier about, more attentive to, excited about, and involved in their tasks. The aforementioned point is especially related to the work enjoyment dimension of flow. A high level of work enjoyment as one of the core dimensions of flow leads to a positive mood that enhances creative thinking (Fullagar & Kelloway, 2009). We thus expect that work enjoyment will encourage individuals who want to be creative to demonstrate creative behaviors more frequently.

Hypothesis 2b. Work enjoyment moderates the relationship between preference for creativity and actual creativity. The higher the work enjoyment, the more positive the relationship.

Our preceding two hypotheses propose that the perception of clear goals promotes work enjoyment, as one of the characteristics of flow (Hypothesis 2a), and that work enjoyment strengthens the association between preference for creativity and actual creativity (Hypothesis 2b). Together, these two hypotheses predict that flow experience mediates the moderating effect of clear goals on the relationship between preference for creativity and actual creativity (Hypothesis 1), constituting a case of mediated moderation (Edwards & Lambert, 2007a). The type of mediated moderation that we expect is present when (1) a variable (clear outcome goals) moderates the relationship between an independent variable (preference for creativity) and a dependent variable (creativity), as in Hypothesis 1; (2) the moderating variable (clear goals) causes a mediating variable (flow experience), as in Hypothesis 2a; and (3) the mediating variable (flow experience) moderates the relationship between an independent variable (preference for creativity) and a dependent variable (creativity), as in Hypothesis 2b; thereby transmitting the moderating effect of the original moderator (Grant & Berry, 2011). Having already proposed these relationships, we present our formal hypothesis for mediated moderation: clear outcome goals strengthen the association between preference for creativity and actual creativity by encouraging work enjoyment, a dimension of flow experience.

Hypothesis 2c. Work enjoyment mediates the moderating effect of perceived clear outcome goals on the association between preference for creativity and actual creativity. When outcome goals are perceived to be clearer, they stimulate work enjoyment, which results in creativity.

We conducted three studies to test our hypotheses. The first pilot field Study 1 established discriminant validity of the preference-for-creativity construct from related constructs. The second field Study 2 examined the relationship between preference for creativity and the moderating role of clear goals (H1). Manipulating clear goals in experimental Study 3 replicated the test of Hypothesis 1 and examined the explanatory mechanism of the flow dimension of work enjoyment following the mediated moderation approach (H2a–2c). Figure 1 presents our model with hypotheses.

Insert Figure 1 about here

Pilot Study 1: Establishing discriminant, predictive, and incremental validity of the preference-for-creativity construct

We argue that preference for creativity is an intention different than creative personality, creative role identity, creative process engagement, or creative self-efficacy. Whereas prior research tended to focus on conditions that maximize the creativity of individuals with creative personalities (e.g., Oldham & Cummings, 1996), *creative personality* (i.e., dispositional creativity) simply denotes an individual characteristic that may, under the influence of appropriate formative factors (such as family or social support for creativity, the extent to which creativity is valued in a particular environment, rewards for creativity, etc.), manifest in preference for creativity (i.e., wanting and liking to be creative). The same is true for openness, one of the Big Five personality dimensions (Barrick & Mount, 1991; McDougall, 1932) that has been associated with creativity (Feist, 1998), and need for cognition, which can also be linked with creative personality (Dollinger, Leong, & Ulicni, 1996).

When preference for creativity is high (i.e., an individual has developed strong inclinations to be creative), an individual will more likely choose to be creative, and creative personality (similar to openness or need for cognition) will be positively related to actual creativity. However, when preference for creativity is low (i.e., weak inclination toward creativity), a creative personality might or might not manifest in creative output. It is choice (Gardner, 1958) and a process occurring over time (Tversky & Kahneman, 1981) that ultimately trigger actual behavior, depending upon a favorable or unfavorable context. Creative personality does help and is a predictor of actual creativity, but it may ultimately prove to be missing an element of preference (an individual's evaluative judgment of the sense of liking something, as developed over the course of time and influenced by previous

experiences) and is also influenced by the immediate context at work. This is supported by the line of thought taken by the interactionist perspective on creativity: Creative personality traits only result in actual creativity when the situation allows for the manifestation of the trait's influences (George & Zhou, 2001). The context at work thereby provides the opportunity for creative personality traits to be more apparent, interacting with an inclination to be creative (preference for creativity) to stimulate higher levels of actual creativity.

Preference for creativity may emerge from social interaction within a cultural/institutional context (Wildavsky, 1987). Individuals' preferences in general can change over time as social relationships are altered throughout the course of life (Loveland, 2003). In line with this thinking, creative preference development is more of a context-dependent process dependent both on the general context (family, friends, interactions, etc., as well as personality, naturally) as well as the work context (leadership, climate, coworkers, etc.). As such, albeit occurring over the course of a lifetime, creative preference changes over time more rapidly than creative personality or personality traits that could be associated with creativity (e.g., openness, need for cognition).

In the next paragraph, we delve into delineating preference for creativity from two rather *general* (as opposed to context-specific) inclinations toward creative behavior: *ideational behavior* (Runco, Plucker, & Lim, 2001) and *adaptation-innovation* (Kirton, 1976). Ideational behavior, as denoted by its label, focuses on the process of ideation, treating ideas as products of creative thinking (Guilford, 1967). This behavior clearly reflects the individual's use of, appreciation of, and skills with ideas (Runco et al., 2001), though it deals with divergent and creative thinking in a general manner, not necessarily pertaining to a particular work domain. Similarly, Kirton's (1976) adaptation-innovation deals with behavioral distinctions between adaptors (those who do things better, generally in an adaptive

manner) and innovators (those who do things differently, generally in a creative manner). Once more, adaptation-innovation relates to a general setting, in- or outside of the work domain, whereas preference for creativity is shaped by the context-at-work factors and focuses on the potential choice to apply creativity when dealing with tasks at work.

We now move on to discuss how preference for creativity differs from three phenomena that are closer to being context-at-work-dependent. *Creative role identity* might be closest to the preference for creativity, as it denotes self-attributed meaning to the role of performing creatively in the workplace (Farmer, Tierney, & Kung-Mcintyre, 2003). As such, for employees with high creative role identity, personal creativity is an essential central part of “who they are.” However, based on the role identity theory, creative role identity is highly contingent upon the context (Farmer et al., 2003) and is thus much more dependent upon work-related environmental factors, such as leadership and immediate social and task-related influences, than preference for creativity. The latter is a built-up, context-dependent process. However, preference for creativity can be manifested to a higher extent than creative role identity when personal creative purposeful behavior is high, even if not all elements of the immediate working context are favorable to such behavior. An example for such an occurrence would be when leader or coworker creativity expectations or rewards are not present, which would not be the case with creative role identity (Farmer et al., 2003).

The *creative process engagement* construct describes a practical state of employee involvement in creativity-relevant methods or processes (Zhang & Bartol, 2010a; Zhang & Bartol, 2010b), including problem identification, information searching, and encoding, idea, and alternative generation. As such, it represents the next step from a psychological state of liking and wanting to be creative and acts as its manifestation, depending upon personal and environmental conditions. On the other hand, *creative self-efficacy*, i.e., employees’ belief

that they can be creative in their work roles (Tierney & Farmer, 2002), relates to individuals' self-confidence and self-esteem. It denotes belief and confidence that they can be creative if they want to, rather than simply liking and wanting to be creative.

Preference for creativity is also different from *actual exhibited creativity*, even if this is self-evaluated. Previous studies have used self-evaluations to predict creative behavior (e.g., Carmeli, Gelbard, & Reiter-Palmon, 2013; Reiter-Palmon, Robinson-Morrall, Kaufman, & Santo, 2012; Zhou, Shin, & Cannella, 2008), despite the concerns about inaccurate reporting due to honesty and social desirability inherent to any self-reporting (Heidemeier & Moser, 2009). Most of the studies that applied creative self-evaluations have focused on actual exhibition of creative behavior at work, although as Reiter-Palmon et al. (2012) reported, some have also labeled these scores as creative involvement. Nevertheless, the basic and most crucial difference between preference for creativity and actual creativity is that preference denotes a step before actual exhibitions of creative behavior. Preference describes an idea or an inclination to be creative. This is not, however, the same as actually demonstrating creative behaviors. These arguments should also hold for not only other-rated creativity but also creative behavior measured with self-evaluations that sometimes exhibit low correlations with other-reported or objective measures of creative behavior (Reiter-Palmon et al., 2012). Those self-reports measure (or should measure) the extent to which employees perceive that they actually exhibit creative behavior, not just their preference for it (i.e., wanting to be creative when given the opportunity to do so within a particular work setting). Even if this might already be more related to operationalization rather than conceptualization or theorizing, we wanted to emphasize this point.

We present the aforementioned variables that could be closely associated with preference for creativity on a continuum ranging from being personality based (dispositional)

to depending heavily upon the context (Figure 1). The variable with the strongest dispositional attributes with respect to individual inclinations toward creative behavior in general is creative personality. Wanting or liking to be creative (preference for creativity) is a step away from creative personality toward the influence of context, which is why it is more likely to also be perceived by others. It describes preference for creativity at work more generally than creative self-efficacy, which is more related to a psychological relationship (self-esteem or lack thereof) with a specific given task or one's work role (Tierney & Farmer, 2002). Preference for creativity is only context dependent as much as the context (at work or the general context) helps shape the preference construction, which is more likely to occur in the process before the actual carrying out of the task. Thus, more general features of the context (Wildavsky, 1987) elicit the construction of preference for creativity above and beyond (and, most importantly, chronologically before) the context of a work environment. Preferences are consequences of people being classified into cultural biases, which are shaped by their broad social contexts (Wildavsky, 1987, 1994).

Creative identity, on the other hand, is much more context(at-work)-dependent; it relates to a specific creative role an employee performs at work (Farmer et al., 2003). The most context-dependent construct might be creative process engagement, which depends both on the person and, heavily, on the context (Zhang & Bartol, 2010b; Zhang & Bartol, 2010a). Naturally, we are aware of the fact that the preference for a creativity construct partially overlaps with the aforementioned phenomena. It would be unrealistic to claim that it is completely different, but Figure 2 serves as a simplification of real-world phenomena that are closely related to each other but still different at their cores, as explained above.

Insert Figure 2 about here

Sample

To establish discriminant, predictive, and incremental validity of the preference-for-creativity construct from related constructs—i.e., creative personality, openness, need for cognition, ideational behavior, adaptation-innovation, creative process engagement, creative self-efficacy, and creative role identity—we first conducted a pilot study on a panel sample ($n = 129$). The employees held a variety of different jobs with various creative requirements, constituting a varied sample with respect to their creativity. About 41% of the respondents were male, and about 37% were younger than 26 years old (mean = 30.23, $SD = 6.32$). Forty-five percent of the respondents reported less than seven years of work experience (mean = 4.34, $SD = 6.45$), and 67% reported less than three years of working with this particular supervisor (dyad tenure; mean = 3.23, $SD = 3.01$).

Measures

We used a translation/back-translation procedure (Brislin, 1986) to translate the items (which we adopted from previous research) from English into Slovenian and back into English.

Preference for creativity. We used a scale developed by Zhou & George, 2001) and adapted it to express preference for this behavior by including the phrase “I like to...” or “I want to” at the beginning of each item. To avoid overlap with innovation implementation, in line with the implicit advice from Montag et al. (2012), we only used eight items concerning the generation of novel and useful ideas, not their implementation. We adapted those items for employee self-reporting and for tapping into the preference for creativity (sample items included, “I want to suggest new ways to achieve goals or objectives,” and “I like to be a good source of creative ideas”) ($\alpha = .93$).

Creative personality. Creative personality was measured with five items aimed at measuring dispositional creativity (Kirton, 1976). A sample item included: “I have a lot of creative ideas” ($\alpha = .80$).

Openness. Openness was measured using a 10-item scale from the Big Five personality dimensions questionnaire (John & Srivastava, 1999) ($\alpha = .61$), for example, “I see myself as someone who[...]is curious about many different things.”

Need for cognition. Need for cognition was assessed using an 18-item version of the need for cognition scale developed by Cacioppo, Petty, and Feng Kao (1984) ($\alpha = .64$). A sample item would be: “I like to have the responsibility of handling a situation that requires a lot of thinking.”

Ideational behavior. Ideational behavior was measured with a 24-item scale developed by Runco, Plucker, and Lim (2001) ($\alpha = .94$). Surveyed items included: “I like to play around with ideas for the fun of it.”

Adaptation-innovation. Adaptation-innovation was assessed with 11 items with factor loadings over .60 from Kirton’s (1976) adaptors-innovators scale. To assess the innovators, we used four items that Kirton (1976) found loaded on the innovators factor ($\alpha = .88$). A sample item would be: “I ... cope with several new ideas at the same time.”

Creative self-efficacy. Creative self-efficacy was assessed using a three-item scale developed by Tierney and Farmer (2002). Representative items include: “I have confidence in my ability to solve problems creatively” ($\alpha = .88$).

Creative role identity. To measure creative role identity, we used Farmer et al.’s (2003) three-item scale. Sample items included: “To be a creative employee is an important part of my identity” ($\alpha = .93$).

Creative process engagement. The measure for creative process engagement was an 11-item scale developed by Zhang and Bartol (2010b). Sample item: “I spend considerable time trying to understand the nature of the problem” ($\alpha = .93$).

Perceived clear outcome goals. We used four items from Jackson and Eklund’s (2004) Event Experience Scale (FSS-2) that tap into how employees perceive given outcome goals to be clear or unclear, and we adapted the items to concern general experiences in the workplace ($\alpha = .94$). Items included: “At work [...] I know clearly what I want to do,” “I have a strong sense of what I want to do,” “I know what I want to achieve,” and “My goals are clearly defined.”

Creative behavior. We used a scale developed by Zhou & George, 2001) and adapted it to reflect self-reported creative behavior ($\alpha = .96$).

Results

Table 1 provides the descriptive statistics for all variables analyzed in Study 1. To evaluate the discriminant validity (meaning that a latent variable was able to account for more variance in the observed variables associated with it than a) measurement error or similar external, unmeasured influences; or b) other constructs within the conceptual framework (Fornell & Larcker, 1981)) we compared the average variance extracted (AVE) of preference for creativity with the shared variance between constructs (preference for creativity and other constructs). The AVE of preference for creativity was .64, which exceeded shared variance that this construct exhibited with creative personality (.50), openness (.36), need for cognition (.14), ideational behavior (.25), adaptation-innovation (.21), creative process engagement (.29), creative self-efficacy (.25), creative role identity (.28), and even self-reported creative behavior (.36), providing evidence of discriminant validity.

Insert Table 1 about here

To evaluate the predictive and incremental validity of the preference-for-creativity scale, we used simple hierarchical regression analysis with creative behavior as the dependent variable (Table 2). In Model 1, we inserted preference for creativity along with all other related constructs. All the context-at-work-dependent variables were significantly positively related to creative behavior (creative process engagement, creative self-efficacy, and creative role identity), and the two general creative behavior variables were in fact negatively related to creative behavior (ideational behavior and Kirton's adaptors-innovators). Preference for creativity demonstrated incremental validity in predicting creative behavior beyond the aforementioned variables ($\beta = .34, p < .01$). In Model 2, we provided an initial test for the moderating role of clear outcome goals on the relationship between preference for creativity and creative behavior, which we subsequently tested in Study 2. The interaction between preference for creativity and clear outcome goals was significant ($p < .01$).

Insert Table 2 about here

Study 2: Methods

In Study 1, we provided initial empirical evidence for discriminant validity of the preference for creativity construct vis-à-vis related constructs, as well as its predictive and incremental validity, on a panel pilot sample using cross-sectional data. We then moved on to apply the construct and test the first hypothesis related to the moderating role of perceived clear outcome goals in the relationship between preference for creativity and supervisor-reported creative behavior in field Study 2.

Sample

Empirical data were collected in two waves and two levels (from 165 employees and their 24 direct supervisors) in September and October 2011 at a Slovenian manufacturing firm that produces steel constructions and employs about 450 people. The company provides original and complete solutions, which include façades and walls, roofs, eco-solutions for diminishing power usage, modular units, steel constructions of every kind, noise-attenuation systems, and fire protection systems.

Most of the employees were in possession of an e-mail address and could be divided into specific work groups with direct supervisors. Those who were included in our sample, which totaled 267 employees, held a wide variety of jobs, including knowledge-intensive jobs, clerical jobs, production jobs, etc. On average, just below seven employees responded per group, and the number of direct reports per group supervisor who answered ranged from 2 to 18. Taking into consideration only the 24 groups that participated in the survey, this accounted for a 61.79% response rate for supervisors' direct reports (the within-group response rates ranged from 15% to 100%). About 66% of the participants were male, and about 41% were younger than 26 years (mean = 38.87, SD = 7.09). Of the respondents, 53.9% reported less than seven years of work experience (mean = 6.49, SD = 5.91), and 46.7% reported less than three years of working with this particular supervisor (dyad tenure; mean = 3.72, SD = 3.70).

Measures

Preference for creativity. As in Study 1, we used eight items concerning the generation of novel and useful ideas from a scale developed by Zhou & George, 2001), and we adapted them to reflect preference for this behavior by including the phrase “I like to” or “I want to” at the beginning of each item ($\alpha = .91$).

Perceived clear outcome goals. As in Study 1, we used four items from Jackson and Eklund's (2004) Event Experience Scale (FSS-2) ($\alpha = .74$).

Creative behavior. As in Study 1, we used eight items from a scale developed by Zhou & George, 2001) ($\alpha = .97$). The supervisors assessed creativity for each employee.

Control variables. We controlled for age (which has been indicated to affect creativity, but does so differently across various domains, e.g. Jones & Weinberg, 2011) and gender (studies have pointed to large differences in the creative achievement of men and women in many fields, e.g. Baer & Kaufman, 2008), as well as for employee education (e.g. Fasko, 2001) and work experience. Work experience in particular is a valuable control because employees who have been performing a particular task for a longer period of time may perceive its difficulty or their creativeness in executing it differently (Amabile, 1998). This also is true for another variable for which we controlled: whether employees had any managerial duties. We also controlled for dyad tenure (how long an employee had been working under the supervision of a particular direct supervisor) because the length of the supervisor-subordinate relationship can impact perceptions regarding work (Fagenson-Eland, Marks, & Amendola, 1997). These control variables were reported by the employees.

In order to reduce the potential influence of common method bias (CMB), we used multisource data and two separate online questionnaires to collect it: one for employees and another for supervisors who evaluated the employees' creativity—the dependent variable in our study. As the data on predictor and moderation variables (preference for creativity and clear goals) were both employee-based, we followed expert advice (Podsakoff, MacKenzie, & Podsakoff, 2012). Data were collected in two waves, the second about three weeks after the first. The items used in our study were part of a large-scale questionnaire; therefore, it is unlikely that respondents were able to guess the purpose of the study and therefore force their answers to be consistent. We also reverse-coded some items in the questionnaire.

Study 2: Results

Table 3 provides the descriptive statistics for all variables analyzed in Study 2. We first observed the factor structure of the focal variables. The expected three-factor solution (preference for creativity, clear goals, and creative behavior) displayed a good fit with the data (Chi-square [167] = 283.9, CFI = .954, SRMR = .051, RMSEA = .065). The factor loadings ranged from .72 to .94 for preference for creativity items, .63 to .84 for perceived clear outcome goals items, and .66 to .80 for creative behavior items.

Insert Table 3 about here

The employees in our sample were nested within groups led by their supervisors. As each supervisor provided ratings of creative behavior for multiple employees, this violated the independence assumption. We therefore applied random coefficient modeling using hierarchical linear modeling (HLM) software package version 7.0 (Raudenbush & Bryk, 2002) with restricted maximum likelihood estimation to test our hypotheses. Such an approach allowed us to model the non-independence in our dependent variable by partitioning its variance into a within-supervisor and between-supervisor component. We present these results in Table 4. In the first step (Model 1), we examined the intercept-only model. In Step 2 (Model 2), preference for creativity ($\gamma = .49, p < .01$) was entered (in addition to all control variables), as was the clear goals variable ($\gamma = .10, ns$). Out of the control variables, only gender related significantly to creativity, indicating that women in our sample exhibited, on average, higher levels of creative behavior than men.

Insert Table 4 about here

To test Hypothesis 1, which predicted that the positive relationship between preference for creativity and actual creativity is contingent upon perceived clear outcome goals, we

created an interaction term (preference for creativity \times clear outcome goals) and entered it into the regression equation in Step 3 (Model 3). The results showed that the interaction term was significant ($\gamma = .34, p < .01$), indicating that clear outcome goals prevent preference for creativity from resulting in supervisor-rated creative behavior (Figure 3). To test this interpretation, we conducted a simple slope analysis: we statistically compared the slopes of both lines to zero. Preference for creativity exhibited a non-significant relationship with creative behavior when the level of clear outcome goals was low (gradient = .64, $t = 1.75, p < .10$) but a significantly positive relationship when it was high (gradient = 2.34, $t = 2.543, p < .05$), thus supporting Hypothesis 1.

Insert Figure 3 about here

Study 3: Methods

To strengthen causal inferences and to rule out alternative explanations, as well as to address the limitations of Study 2 (mostly related to cross-sectional data), we conducted an experimental study in which participants generated creative outputs to solve a business problem. Drawing upon the results of our second study, the goal of our third study was to test the results we obtained using a different method, controlling for the task, and to use multiple experts to rate the creative outcomes instead of creative behavior. Additionally, we wanted to examine the explanatory mechanism of work enjoyment, one of the dimensions of flow that we proposed would mediate the relationship between preference for creativity and creative outcomes, moderated by perceived clear outcome goals.

Sample

We conducted a laboratory experiment with 139 first-year undergraduates within an Organizational Behavior course at a Slovenian university. The age of the participants ranged from 18 years to 25 years, and the mean age was 19.65 years ($SD = 1.10$). Fifty-three percent

of the participants were male and 73% had some work experience such as student or summer jobs. To encourage participants to take the task seriously, we informed them that their solutions would be evaluated by experts in creativity (Grant & Rothbard, 2013). They were given extra points in their course for participation. Before they began the study, they also reported their preference for creativity using items from Zhou and George (2001) that are used to measure creative idea generation. Such items were adapted to relate to their preference for this behavior and aligned with our approach in Study 2. According to their responses, the participants were assigned to three classrooms in terms of their preference for creativity (low, moderate, or high) prior to the study.

Design and instructions

The experiment thus used a three-by-two (low preference for creativity/moderate preference for creativity/high preference for creativity x clear outcome goals/unclear outcome goals) between-subjects factorial design. The participants within all three classrooms (low/moderate/high preference for creativity) were then randomly assigned to two conditions in terms of the clear goal manipulation prior to the experiment (clear outcome goals condition/unclear outcome goals condition). We introduced the study by explaining that we were interested in studying how people solve business problems. The experiment began by presenting a project scenario to the participants. The participants were assigned the role of a company's project managers. In the scenario, the organization had applied for a new project, and a project team of six students was assembled. It should be noted that the teamwork was only part of the design and that the generation of ideas occurred individually. Such a design was used only because students always worked in teams in this course and we did not want to change methods of coursework to incur unintended consequences on work climate. The general instructions for all conditions were as follows:

Our organization is applying for a new project called the Island in the Slovenian Sea. The aim of the project is to generate unconventional ideas for the different business aspects of this imaginary island, which would help to attract more tourists to the Slovenian Sea. Your task as a team is to come up with new ideas for different aspects of the new project and thereby to develop a draft business plan that would specify how you would implement ideas for each aspect of the business plan.

Each participant in a project team was randomly assigned a particular role (each student had to work on and provide solutions for different aspects of the given project: finances, attractiveness, safety, feasibility, acceptance, and impact of the project on the satisfaction of the residents and visitors). The scenario consisted of a single session (40 minutes).

Outcome goal manipulation

Prior to beginning our experiment, we introduced our manipulation of clear and unclear outcome goals, each in two conditions. The manipulation consisted of two coherent aspects from which a specific goal setting was derived—that is, clear goals in the first group and unspecific goals in the second—and the members were given instructions that corresponded with a particular goal setting. To ensure that participants in the clear and unclear goal conditions would experience different degrees of goal clarity, we used Latham, Erez, and Locke's (1988) manipulation for goal setting. We gave participants in the clear goal condition a brief description of the outcome that was expected from each team member (what they should do but not how they should do it; for example, for those addressing the financial aspect we said, "Describe in detail how you will make money from the project"). For the unclear outcome goal condition, we gave participants vague goals (e.g., "Do your best to address the financial aspect of the project," cf. Whitney, 1994).

Clear outcome goal manipulation. For clear goal manipulation, these instructions included the following: [Each team member had to achieve a given goal for his own role.] For example:

Finances. “A financial manager should consider options about how this project will generate money and choose the best one while also exploring some of the more unconventional ways of earning money. What are the possible ways to generate money from the project in a more unconventional way? Your goal is to come up with one unconventional way of earning money from the project and describe it in detail.”

Attractiveness. “A marketing manager should consider options for the best ways of promoting a project and choose the best one while also exploring some of the more unconventional ways of promoting the project. What are the possible unconventional ways to promote the project? Your goal is to come up with one unconventional slogan that will attract the target consumers and describe it in detail.”

Safety. “A safety manager should consider options about the best ways of taking care of safety on the island, concerning crime, terrorism, and health issues, and choose the best option while also exploring some of the more unconventional ways of dealing with safety issues. What are the possible unconventional ways to deal with security issues on the island? Your goal is to come up with and describe in detail one unconventional way that you will use to address safety issues on the island.”

Feasibility. “A feasibility manager should consider options about where and how this project will obtain startup capital for the implementation of the project and choose the best source while also exploring some of the more unconventional ways of getting startup capital. What are the possible unconventional ways to obtain startup capital? Your goal is to come up with and describe in detail one unconventional way that you will get startup capital for the island.”

Acceptance. “An acceptance manager should consider options about the influence of the project on the environment and choose the best one while also exploring some of the more unconventional ways of reducing negative impacts of the project on the environment. What are the possible unconventional ways to deal with environmental issues? Your goal is to come up with and describe in detail one unconventional way that you will address the environmental issues on the island.”

Impact of the project on the satisfaction of residents and visitors. “A satisfaction manager should consider options about the best ways to ensure the satisfaction of all the actors (visitors and employees on the island, as well as local people) on the island and choose the best one while also exploring some of the more unconventional ways of achieving a high degree of satisfaction of all actors. What are the possible unconventional ways to deal with satisfaction issues? Your goal is to come up with and describe in detail one unconventional way that you will address the satisfaction issues on the island.”

Unclear outcome goal manipulation. Conversely, we induced an unclear outcome goal manipulation using the following instructions:

“Do your best to come up with and describe in detail one unconventional way that you would address the financial aspect/attractiveness/safety/feasibility/acceptance/impact of the project on the satisfaction of the residents and visitors of the project.”

Please note that the roles (finances, attractiveness, etc.) were randomly assigned to the participants.

Manipulation check. After the participants completed the task, we assessed *perceived clarity of outcome goals* using four items (the same as in Study 2) from the Event Experience Scale from Jackson & Eklund, 2004) as a manipulation check. The participants also reported on the work enjoyment dimension of flow as their state during the task using a scale by Bakker (2008), concentrating on the task at hand from Jackson and Eklund’s (2004) Event Experience Scale (FSS-2) and seven items for extrinsic motivation from Vallerand et al. (1992). Each individual’s *creative output* was assessed by three independent raters blind to the manipulations and the purpose of the study (experts and evaluators in the field of creativity) on a scale from “1 = not at all creative” to “7 = very creative.” The three raters’ reliability (ICC2 = .76) and agreement (average deviation = .78) were within conventional guidelines (LeBreton & Senter, 2008). We thus averaged their ratings into a measure of overall creativity for the participants’ outputs.

Study 3: Results

Means and standard deviations for each condition are presented in Table 5.

Manipulation checks. In terms of manipulation checks, a multivariate analysis of variance (MANOVA) showed the expected main effects of the clear/unclear outcome goal manipulation on perceived clear goals ($F[1,137] = 8.71, p < .01$).

Hypotheses tests. Turning to creative output as the dependent variable, Table 5 lists creativity means in differential goal clarity conditions ($F[1,138] = 24.81, p < .01$). The MANOVA also revealed an interaction effect of the clear outcome goal manipulation and preference for creativity on creative output that was marginally significant ($F[4,135] = 2.80, p = .06$; Figure 4). This provides some support (albeit only at the 94% confidence level) for Hypothesis 1.

Testing the relationships by including controls. In addition, we also performed a MANCOVA where we controlled for the type of subtasks (because our experimental design included participants performing different types of subtasks), extrinsic motivation (because the statement we used to induce the participants to take the task seriously might have had differential effects on various participants' extrinsic motivation), and concentration on the task at hand (the potential mismatch between skills and different subtasks should be reflected in individuals' concentration on the task at hand). The MANCOVA (controlling for type of subtasks, extrinsic motivation, and concentration on the task at hand) revealed that the interaction effect of the clear outcome goal manipulation and the preference for creativity on creative output was significant ($F[2,137] = 3.07, p = .05$). This provides additional and more robust support for Hypothesis 1.

Mediated moderation test. We then used Hayes' (2013) PROCESS macro to examine whether participants' reports of work enjoyment mediated the moderating effect of perceived clear outcome goals on the relationship between preference for creativity and creative output.

Applying bootstrap procedures to construct 95% bias-corrected confidence intervals around the indirect effects of both levels of clear outcome goals (Edwards & Lambert, 2007b), the confidence interval for the indirect effect of preference for creativity on creative output through work enjoyment was significant and excluded zero for clear outcome goals (.18, $p = .028$), as well as for unclear outcome goals (.10, $p = .05$), which indicated that work enjoyment mediated the relationship between preference for creativity and creative output within the clear goal outcome conditions, supporting Hypotheses 2a–2c.

General Discussion

The results of field Study 2 showed that transforming creative ideas into supervisor-rated creativity depends on employees' perceptions of clear goals regarding the outcome of conducting their complex tasks. Perceived unclear outcome goals seem to prevent individuals' preference for creativity to result in creative behavior at work, whereas their perceptions of outcome goals as clear resulted in higher levels of supervisor-rated creative behavior. By way of our experiments conducted in Study 3, we replicated and found additional support for this moderation and, drawing on flow theory (Csikszentmihalyi, 1992, 1997a), tested a mediating explanatory mechanism of work enjoyment. Our results supported the proposed moderated mediation model, whereby the manipulation of clear goals led to individuals' preference for creativity to result in higher work enjoyment and, in turn, superior ratings of their creative outcomes.

Theoretical contributions

Our studies make two distinct contributions to the creativity literature. Our first contribution is related to providing conceptual insight into the initial phases of creative idea generation, i.e., transforming wanting to be creative (preference for creativity) into creative behavior. This study is, to the best of our knowledge, the first to use the economics-based

preference development literature (Druckman & Lupia, 2000; Slovic, 1995; Tversky & Thaler, 1990). We did so in order to identify, define, and conceptualize a novel antecedent of creativity with regard to preference for creativity. We also proposed and demonstrated in pilot Study 1 that preference for creativity differs from creative personality, openness, need for cognition, ideational behavior, adaptation-innovation, creative process engagement, creative self-efficacy, and creative role identity. We have shown that it demonstrates sufficient predictive and incremental validity above and beyond those constructs.

We then drew on goal-setting theory (Lee, Locke, & Latham, 1989) to examine contextual boundary conditions for transforming individuals' preference for creativity into actual creativity with respect to how individuals perceive their goals to be clear or unclear. Our studies 2 and 3, using both field and experimental data, indicate a crucial role of perceived clear outcome goals for individuals preferring to be creative and working on a complex task to produce behavior or outcomes that are other-rated as creative. This is in line with previous research on creativity that showed the importance of explicit instructions for divergent thinking (Runco, Illies, & Reiter-Palmon, 2005; Shalley, 1991). We extended this line of research and showed how the contextual factor of clear outcome goals can be seen as an intervention that further fosters creative behavior when individuals like and want to choose to be creative at work.

Our second contribution to the creativity literature is the in-depth examination of the explanatory micro-mechanism in the moderating role of perceived clear goals. In order to foster high levels of creativity at work, a focused, goal-oriented approach is apparently required. Complementing goal-setting theory and flow theory (Csikszentmihalyi, 1992, 1997) helped to explain how, for the employees who are successful in transforming their preference for creativity into superior supervisor-rated creative performance, clear goals result in work

enjoyment. This dimension of flow enables an in-depth understanding of the psychological mechanism that enables individuals to express their creative preferences, contributing to achieving their own purpose and meaning at work, as well as the organization's, with higher levels of creative performance from the employees. Complementing social and contextual theories of creativity (Amabile, 1996; Amabile et al., 1996; West, 2002; Woodman et al., 1993), we have shown that clear goals contribute to work enjoyment, which leads individuals to greater effort and persistence and thereby helps individuals to overcome the potential risks associated with wanting to be creative. The employees who enjoy their work are highly motivated to engage in creative behavior and thereby actually transform creative ideas to other-rated creative outcomes. It is not total control that is suitable for creative ideas manifesting in creative output but rather guidelines in terms of clear outcome goals (as perceived by the employees) that enable work enjoyment to emerge.

Practical implications

Our two studies have shown that clear outcome goals act as a tangible managerial remedy that contributes to transforming individuals' creative preference into actual creativity, be it in terms of creative behavior or creative outcomes. Therefore, our research has important implications for human resource selection processes, job design, and leadership training. If managers are interested in boosting creativity, they should not only pay attention to creative personality when selecting employees; they should also consider whether their work environment will interact to further stimulate a high level of individual preference for creativity. Namely, a proper fit between individuals' general and work context will be more likely to lead to preference for creativity manifesting in actual creativity. Managers should be aware that without maintaining high preference for creativity from their employees (e.g., providing them with relevant information for individuals to become aware of their creative

preferences) and enabling creativity to thrive, actual creativity will most likely not materialize, even if they select individuals with highly creative personalities.

The key element in this postulation is not only selecting the individuals that exhibit the highest preference for creativity, but also accounting for their potential work enjoyment, a dimension of flow at work. What is even more important is that such employees perceive and understand the outcome goals for their complex tasks as clear. Managers should therefore help their employees to clearly understand what is expected of them in terms of their task outcome.

Perceived clear outcome goals should result in the employees' activation of work enjoyment, facilitating the transformation of creative ideas into other-rated creativity. Individuals who enjoy creative work on complex tasks (i.e., exhibit work enjoyment, a flow dimension) seem to benefit from perceiving clear outcome goals by being ensured of expectations and then beneficially capitalizing on their preference for creativity and work enjoyment. Ultimately, increased understanding of these conditions could contribute to achieving individuals' own purpose and meaning at work, as well as the organization's, with higher levels of creative performance from its employees.

Limitations and future research directions

Despite the aforementioned contributions, our research is not without limitations. Our first limitation is related to the field Study 2. Even though we collected data in two waves separated by a couple of weeks, the data that we gathered were ultimately cross-sectional, which is why we could not infer causal claims but only test their implications based on correlational analyses. Our experimental Study 3 did, of course, help alleviate those concerns and addressed potential speculations that the causality between the variables in the field-study model (preference for creativity, goal clarity, and actual creativity) could be circular instead

of linear. Nonetheless, future longitudinal field research which could test the implications of causality in real life and examine a temporal dimension, i.e., how perceived clear outcome goals help stimulate work enjoyment and consequently creativity over time, is warranted.

Second, although we provided evidence that preference for creativity differs from creative personality, openness, need for cognition, ideational behavior, adaptation-innovation, creative process engagement, creative self-efficacy, and creative role identity, a limitation is the fact that we did not measure intrinsic motivation for creativity (having strong interest in creativity for the sake of creativity itself; Collins & Amabile, 1999; Mumford, 2003) in any of our studies. Therefore, we have not directly evaluated similarity/difference with preference for creativity. Although it is beyond the scope of our paper to delineate preference for creativity from intrinsic motivation for creativity, we assume that intrinsic motivation for creativity does share conceptual similarities with preference for creativity, but it might be that it is more personality-based. This is supported by the fact that intrinsic motivation was also found to exhibit higher correlations with a personality dimension of need for cognition (.69 in Amabile, Hill, Hennessey, & Tighe, 1994, as opposed to the correlation of .39 that we have found between preference for creativity and need for cognition). This provides a starting point to question the validity of commonly used measures of intrinsic motivation for creativity, which is likely not without limitations, as it might be based more on the personality factors rather than the more context-dependent preference development process. However, this is still only a speculation, and future research that would further conceptually distinguish preference for creativity from intrinsic motivation for creativity and evaluate their potentially differential sets of predictors and outcomes is warranted. A related limitation (of our pilot Study 1) could also be seen in the relatively low reliability alpha scores for some of the constructs that we distinguished preference for creativity from, in particular for two personality indicators: openness and need for cognition ($\alpha = .61$ and $.64$, respectively). This could be due to a

relatively small sample size for a study with as many variables as we tackled. Therefore, future research could go further to establish predictive validity of preference for creativity above and beyond other constructs by applying larger sample sizes and research designs above the convenience sample that we used in our pilot Study 1.

Third, an overall limitation of our studies is the operationalization of the perceived clear outcome goal construct and whether this phenomenon is personally/internally generated or externally assigned. In Study 2, due to its operationalization and measurement in the field, it seems that the perceived outcome goal clarity variable was more related to the internal understanding of the respondents, whereas in the experimental Study 3, it was clearly externally set. This thus needs to be kept in mind when interpreting and comparing the results of both studies, which can be viewed as both a limitation and also as a strength because it enables greater generalizability of results across different goal types.

Fourth, by focusing only on perceived outcome goals, we have only tapped into one dimension of job design and individual context at work. Other variables identified in flow theory which correlate with work enjoyment, such as feedback (Jackson & Eklund, 2004), self-monitoring, or resiliency, could play an equally important role in influencing the transformation of preference for creativity into other-rated creativity at work. Future research could thus concentrate on other boundary conditions of the main examined relationship postulated here.

Fifth, our research only focused on the outcomes of preference for creativity, i.e., examining how it can be manifested in creative behaviors. The assumption for such an investigation is that some (or a lot of) people that work on complex tasks and wish to exhibit creative behavior exist in companies, i.e., that the preference development process for those people has occurred outside of the workplace. Although this is a safe assumption in light of

recent businesses' focus on creativity and innovation in the current economy, future research could also explore the antecedents of individuals' preference for creativity, be it in the form of personal characteristics or contextual factors related to individuals' general environment.

Sixth, a limitation of our Study 3 was also related to our experimental design. We used the group design only as the part of the design, though the generation of creative ideas occurred individually. We used group/team design only because our participants always worked in teams in the course where we performed the experiment and we did not want to change methods of coursework to incur unintended consequences on work climate. Thus, we had to have different types of subtasks. This needs to be kept in mind when interpreting the results of Study 3.

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Table 1**Study 1—Means, Standard Deviations, and Correlations^{a, b}**

Variable	Mean	SD	1	2	3	4	5	6	7	8	9	10	11
1 Preference for creativity	5.6933	.89221	(.93)										
2 Creative personality	5.5711	.91306	.71**	(.90)									
3 Openness	5.0370	.63800	.60**	.52**	(.61)								
4 Need for cognition	4.0986	.40633	.38**	.38**	.36**	(.64)							
5 Ideational behavior	4.8086	.94722	.55**	.57**	.63**	.35**	(.94)						
Innovators (from Kirton's 6 adaptation-innovation scale)	4.9595	.92621	.46**	.58**	.56**	.02	.53**	(.88)					
7 Creative self-efficacy	5.7183	.87588	.50**	.42**	.48**	.11	.56**	.49**	(.88)				
8 Creative role identity	5.4057	1.15458	.53**	.49**	.46**	.27**	.59**	.50**	.65**	(.93)			
9 Creative process engagement	5.5120	.85993	.54**	.63**	.33**	.27**	.38**	.44**	.39**	.36**	(.93)		
10 Clear outcome goals	5.5788	1.21888	.16	.29**	.10	-.04	.10**	.39**	.17	.05	.37**	(.94)	
11 Creative behavior	5.4101	.96010	.66**	.58**	.36**	.26**	.37**	.38**	.57**	.52**	.68**	.53**	(.96)

^a n = 129^b Coefficient alphas are on the diagonal in parentheses.** $p < .01$, * $p < .05$

Table 2**Study 1—Hierarchical linear regression analysis results for self-reported creative behavior as the dependent variable ^a**

	Model 1				Model 2			
	B	St. error	Beta	t	B	St. error	Beta	t
Openness	-.059	.119	-.039	-.499	-.017	.089	-.011	-.192
Preference for creativity	.369	.091	.343**	4.057	.331	.068	.308**	4.841
Need for cognition	-.010	.156	-.004	-.062	-.036	.116	-.015	-.308
Ideational behavior	-.183	.082	-.181*	-2.223	-.102	.062	-.101	-1.638
Innovation (KAI)	-.096	.083	-.093	-1.163	-.261	.065	-.252**	-4.008
Creative personality	.068	.096	.064	.703	.097	.072	.092	1.345
Creative process engagement	.460	.080	.412*	5.779	.270	.062	.242**	4.344
Creative self-efficacy	.302	.085	.276*	3.567	.197	.065	.180**	3.058
Creative role identity	.126	.065	.152*	1.934	.272	.051	.327**	5.273
Clear outcome goals					.306	.037	.389**	8.309
<i>Interaction effects</i>								
Preference for creativity × Unclear outcome goals					-.199	.047	-.193**	-4.208
R ² (F, df)	.66 (25.850, 119)				.82 (47.659, 117)			

^a n = 129

**p < .01, *p < .05, †p < .10

Table 3**Study 2—Means, Standard Deviations, and Correlations^{a, b, c, d}**

Variable	Mean	SD	1	2	3	4	5	6	7	8	9
1 Age ^c	2.19	1.151	-								
2 Gender ^d	1.66	.475	-.04	-							
3 Education	3.61	.881	-.38**	.01	-						
4 Work experience	6.49	5.91	.42**	-.19*	-.31**	-					
5 Dyad tenure	3.72	3.69	.27**	-.32**	-.14	.61**	-				
6 Managerial duties	1.38	.79	-.00	.02	.21**	.02	-.03	-			
7 Preference for creativity	5.79	.85	-.07	.12	-.07	-.08	-.12	-.03	(.91)		
8 Clear outcome goals	5.33	1.06	.01	-.09	-.09	-.04	-.09	-.17*	.37**	(.74)	
9 Creativity	4.28	1.43	-.10	.17*	.01	-.04	-.06	.06	.23**	-.04	(.97)

^a n = 165

^b Coefficient alphas are on the diagonal in parentheses.

^c Age was classified into 5 classes: 1 = up to 26, 2 = 27–35, 3 = 34–43, 4 = 44–53, 5 = 54 and older.

^d 1 = 'female,' 2 = 'male'

** $p < .01$, * $p < .05$

Table 4**Study 2—HLM results for creativity as the dependent variable^{a, b, c, d}**

	Model 1	Model 2	Model 3
Intercept	4.33** (.14)	3.66** (.62)	3.46** (.60)
Age		-.01 (.07)	.03 (.08)
Gender		.47* (.21)	.50* (.20)
Education		-.08 (.10)	-.05 (.11)
Work experience		-.01 (.02)	-.02 (.02)
Dyad tenure		.01 (.03)	.02 (.03)
Managerial duties		.17 (.12)	.23 [†] (.14)
Clear outcome goals		.10 (.12)	.15** (.05)
Preference for creativity		.49** (.16)	.30 (.20)
<i>Interaction effects</i>			
Preference for creativity × Clear outcome goals			.34** (.12)
Pseudo R ^{2d}		.13	.18
Deviance	580.09	581.39	579.05

^a n = 165^b Robust standard errors are presented next to fixed effects in parentheses.^c Values in bold are relevant to the tests of the hypotheses.^d We report Snijders and Bosker's (1999) overall pseudo R² for each model. These estimates are based on proportional reduction of Level 1 and Level 2 errors owed to predictions in the model.

** p < .01, * p < .05, † p < .10

Table 5

Study 3—Means and Standard Deviations by Condition ^a

Condition	Clear outcome goals	Work enjoyment	Creative output
Unclear outcome goals (<i>n</i> = 68)	4.95 (1.23)	4.62 (1.12)	3.07 (1.19)
Clear outcome goals (<i>n</i> = 71)	5.49 (.92)	5.14 (.99)	4.44 (1.42)

^a Standard deviations are in parentheses.

Table 6
Study 3—Mediated moderation analyses for work enjoyment as the explanatory mechanism ^a

Variables	Work enjoyment								Creativity							
	Step 1				Step 2				Step 1				Step 2			
	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>b</i>	<i>SE</i>	β	<i>t</i>	<i>b</i>	<i>SE</i>	β	<i>t</i>
													.25*	.12	.20	2.31
Work enjoyment	.27**	.10	.24	2.88	.15	.11	.14	1.39	-.21	.15	-.14	-1.36	-.25	.15	-.17	-1.65
Preference for creativity	.40**	.09	.38	4.50	.38**	.08	.39	4.55	.17	.12	.12	1.39	.06	.13	.04	.47
Clear outcome goals																
Preference for creativity X clear outcome goals					.05[†]	.03	.15	1.69	.26**	.04	.56	5.87	.25**	.04	.53	5.57
R ²	.32**				.34**				.28**				.31**			
F (df)	32.67** (136,2)				23.03** (135,3)				17.78 (135,3)				15.09 (134,4)			
ΔR ²					.02*								.03*			

^a Values in bold are relevant to tests of our hypotheses. ^b **p<.01, *p<.05, [†]p<.10

Figure 1
Research model with hypotheses

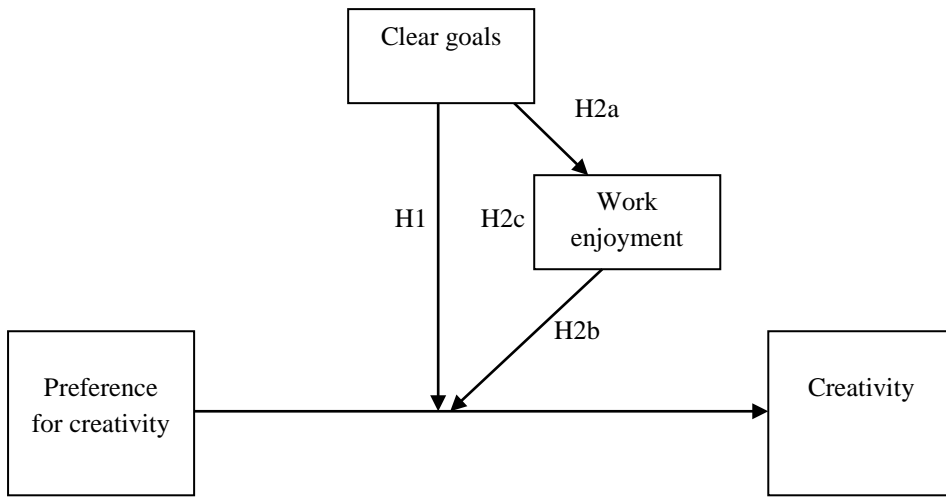


Figure 2

Variables closely associated with preference for creativity on a continuum ranging from being personality based to depending heavily upon the context at work, or being general (unrelated to the work domain)

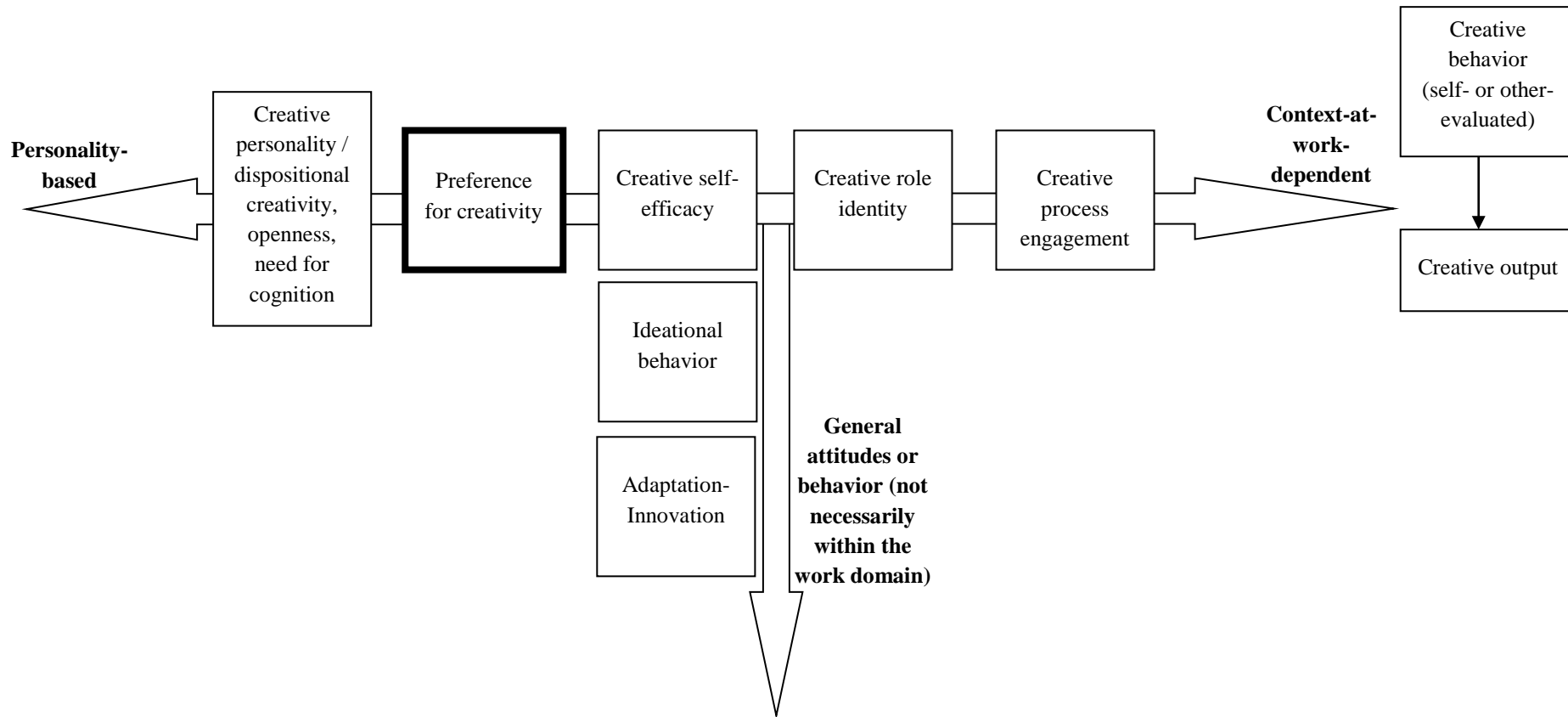


Figure 3

Study 2—Relationship between preference for creativity and supervisor-rated creativity by level of clear outcome goals

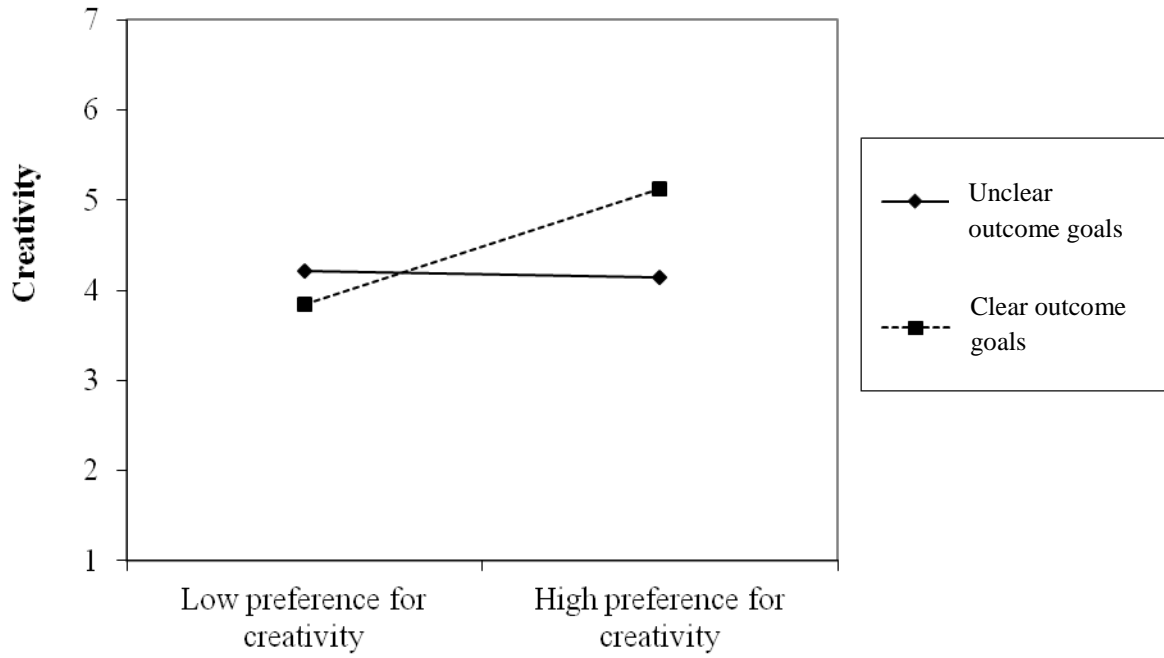


Figure 4

Study 3—Creative output in different experimental conditions

